



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,975	06/29/2001	Mark R. Schmitt	AM100341	9267
25291	7590	10/04/2006	EXAMINER	
WYETH PATENT LAW GROUP 5 GIRALDA FARMS MADISON, NJ 07940			TRUONG, TAMTHOM NGO	
			ART UNIT	PAPER NUMBER
			1624	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,975

Applicant(s)

SCHMITT ET AL.

Examiner

Tamthom N. Truong

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6-9-06 (RCE).
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 2-4, 6-8, 10-12, 14, 15, 17-20, 22, 67, 74, 75-77, 79-81, 83-85, 87, 88, 90-93, and 95-99 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: EAST Search.

Continuation of Disposition of Claims: Claims pending in the application are 2-4,6-8,10-12,14,15,17-20,22,67,74-77,79-81,83-85,87,88,90-93 and 95-99.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 06-09-06 has been entered.

Claims 1, 5, 9, 13, 16, 21, 23-66, 68-73, 78, 82, 86, 89 and 94 are cancelled.

Claims 2-4, 6-8, 10-12, 14, 15, 17-20, 22, 67, 74, 75-77, 79-81, 83-85, 87, 88, 90-93, and 95-99 are pending.

In light of the massive claimed subject matter and an extensive list of proviso, the following restriction is necessary.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

Group 1: Claims 2-3, 6, 7, 10, 11, 14, 15, 17-20, 22, 67, 96, 98 and 99 (in part),
drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **piperidinyl** or **piperidinol** group;
classified in classes 514 and 544, various subclasses depending on substituents.

Group 2: Claims 2, 3, 6, 7, 10, 11, 14, 15, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is optionally substituted **thiomorpholinyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 3: Claims 2-4, 6, 7, 10, 11, 14, 15, 18-20, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted alkylamino, or dialkylamino group, or

NR^aR^b wherein R^a and R^b **do not** form a ring.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 4: Claims 2, 3, 6-8, 10-12, 14, 15, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted alkyl group.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 5: Claims 2, 3, 6, 7, 10, 11, 14, 15, 17-20, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in

a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **pyrrolidinyl** or **pyrrolyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 6: Claims 2, 3, 6, 7, 10, 11, 14, 15, 17-20, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **imidazolyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 7: Claims 2, 3, 6, 7, 10, 11, 14, 15, 17-20, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **tetrahydrofuranyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 8: Claims 2, 3, 6, 7, 10, 11, 14, 15, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **phenyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 9: Claims 2, 3, 6, 7, 10, 11, 14, 15, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **cycloalkyl** group.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 10: Claims 2, 3, 6, 7, 10, 11, 14, 15, 22, 67, 96, 98 and 99 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is a group not mentioned above.

classified in classes 514 and 544, various subclasses depending on substituents.

Further restriction and election of species will be required if this group is elected.

Group 11: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93 and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **piperidinyl** or **piperidinol** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Art Unit: 1624

Group 12: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93 and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is optionally substituted **thiomorpholinyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 13: Claims 74-73, 79, 80, 83, 84, 87, 88, 90-93 and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted alkylamino, or dialkylamino group, or

NR^aR^b wherein R^a and R^b **do not** form a ring.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 14: Claims 74-77, 79-81, 83-85, 87, 88, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted alkyl group.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 15: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R¹ is an optionally substituted **pyrrolidinyl** or **pyrrolyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 16: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R¹ is an optionally substituted **imidazolyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 17: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R¹ is an optionally substituted **tetrahydrofuranyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 18: Claims 74-76, 79, 80, 83, 84, 87, 88, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **phenyl** group;

classified in classes 514 and 544, various subclasses depending on substituents.

Group 19: Claims 74-76, 79, 80, 83, 84, 87, 88, 90-93, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is an optionally substituted **cycloalkyl** group.

classified in classes 514 and 544, various subclasses depending on substituents.

Group 20: Claims 74-76, 79, 80, 83, 84, 87, 88, and 95 (in part), drawn to a method of treating or inhibiting the growth of cancerous tumor cells that express **multiple drug resistance (MDR)**, in a mammal in need thereof which comprises administering to said mammal an effective amount of a compound of formula I wherein:

R^1 is a group not mentioned above.

classified in classes 514 and 544, various subclasses depending on substituents.

Further restriction and election of species will be required if this group is elected.

Inventions of Groups 1-20 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are drawn to two **distinct methods** using a compound of formula I wherein variable R¹ represents a broad range of rings and moieties that can drastically change the core of triazolopyrimidine.

The inventions of Groups 1-20 have a common core of *triazolopyrimidine*, which does not sufficiently define the invention, and is not a contribution to the art. It is the combination of said core and at least variable R¹ that gives compounds of each group their unique physical, chemical properties and biological activities. Depending on what R¹ represents, the claimed formula would have a different core structure. Thus, the Markush group of formula I is an improper Markush group. Furthermore, a reference anticipated or rendered obvious compounds of one group would not do so to those of other groups. Therefore, a separate search is required for each group.

Note, a preliminary search in EAST yields a total of 1,793 hits which clearly shows an overwhelming number of references for consideration.

Because these inventions are independent or distinct for the reasons given above and to search as well as examine the 20 different inventions would be a serious burden on the examiner

if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Due to the complexity of the grouping, the restriction is presented in writing. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.


Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Art Unit: 1624

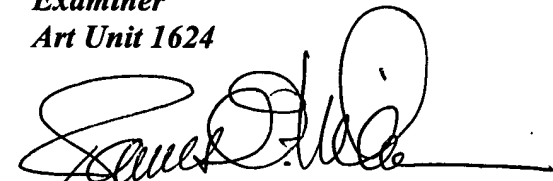
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M, T and Th (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Tamthom N. Truong
Examiner
Art Unit 1624

9-26-06


JAMES O. WILSON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1600